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## CLAIMS

1. A watermark insertion apparatus comprising:  
a watermark insertion section that inserts in a  
5 program watermark that differs for each program  
distribution destination; and  
a code insertion section that inserts in said program  
watermark verification code that prevents said program  
from operating correctly when said watermark is tampered  
10 with;  
wherein said watermark verification code is made  
identical regardless of said distribution destination.
2. The watermark insertion apparatus according to  
15 claim 1, wherein said watermark is generated from ID  
information that uniquely determines a program  
distribution destination.
3. The watermark insertion apparatus according to  
20 claim 1, further comprising a function insertion section  
that defines a function that outputs a predetermined  
constant from said watermark and inserts an expression  
that assigns said function to a variable in said program;  
wherein  
25 said watermark verification code is a conditional  
branch that determines whether said variable and said  
constant are equal, and when said variable and said  
constant are not equal halts said program; and

said watermark verification code is made identical regardless of said distribution destination.

4. The watermark insertion apparatus according to claim 1, wherein said watermark verification code is necessary for said program to be made to operate correctly.

5. The watermark insertion apparatus according to claim 4, wherein said watermark verification code has inserted a calculation expression that does not affect a decision statement of a decision branch generated from said watermark in said decision branch extracted from said program.

6. A watermark extraction apparatus comprising:  
a program input section that inputs a program in which the watermark insertion apparatus according to claim 1 has inserted said watermark and said watermark verification code; and

a watermark detection section that extracts said watermark from said program and generates ID information that uniquely identifies said distribution destination based on said watermark;

wherein a distribution destination is identified based on generated said ID information.

7. A program illegal distribution prevention system comprising:

inserting a in a program watermark that differs for each program distribution destination; and

converting a part other than a location at which said watermark is inserted while maintaining  
5 specifications of said program.

11. A watermark insertion program that causes a computer to:

insert watermark that differs for each program  
10 distribution destination in said program and use said watermark;

prevent said program for distribution from operating correctly when said watermark is tampered with; and

15 insert watermark verification code that is identical regardless of said distribution destination in said program for distribution.

12. A watermark insertion apparatus comprising:

20 a watermark insertion section that inserts in a program watermark that differs for each program distribution destination; and

a conversion section that converts a part other than a location at which said watermark is inserted while  
25 maintaining specifications of said program.

13. The watermark insertion apparatus according to claim 12, wherein said conversion section inserts an

execution code pair that does not affect specifications in a part other than a location at which said watermark is inserted.

5 14. The watermark insertion apparatus according to claim 12, wherein identification information is stored that indicates an insertion location of said watermark.

15 15. The watermark insertion apparatus according to claim 14, wherein said identification information is a method name or line number.

16. The watermark insertion apparatus according to claim 12, wherein said conversion section performs  
15 obfuscating so that specifications are not affected in a part other than a location at which said watermark is inserted.

17. A watermark extraction apparatus comprising:  
20 a program input section that inputs a program in which the watermark insertion apparatus according to claim 12 has inserted said watermark; and  
a watermark detection section that extracts said watermark from said program;  
25 wherein a distribution destination is identified based on extracted said watermark.

18. A watermark extraction apparatus comprising:

a program input section that inputs a program in which the watermark insertion apparatus according to claim 15 has inserted said watermark; and

5 a watermark detection section that obtains said identification information, identifies a watermark insertion location from said identification information, and extracts said watermark from only identified said watermark insertion location;

10 wherein a distribution destination is identified based on extracted said watermark.

19. A program that causes a computer to:

insert in a program watermark that differs for each program distribution destination; and

15 convert a part other than a location at which said watermark is inserted without changing specifications of said program.

20. The watermark insertion apparatus according to claim 12, wherein said conversion section converts a sequence of a part that is a part other than a location at which said watermark is inserted and is a part that does not affect specifications even if said sequence is switched around.

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21. The watermark insertion apparatus according to claim 20, wherein historical information on a part that does not affect said specifications is held, and using

said historical information, conversion of a part that does not affect said specifications is made to differ for each distribution destination.